



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,411	09/24/2003	Stanley V. Stephenson	HES 2003-IP-010770U1	7924
29920	7590	01/12/2005	EXAMINER	
JOHN W. WUSTENBERG			PATEL, HARSHAD R	
P.O. BOX 1431			ART UNIT	
DUNCAN, OK 73536			PAPER NUMBER	

2855

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

88

<b>Office Action Summary</b>	<b>Application No.</b> 10/670,411	<b>Applicant(s)</b> STEPHENSON, STANLEY V.	
	<b>Examiner</b> Harshad Patel	<b>Art Unit</b> 2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-14, 16-31 and 33-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14, 16-31 and 33-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Arguments***

1. Applicant's arguments filed 12/21/04 have been fully considered but they are not persuasive. The applicant argues, that the Farchi reference does not teach the fluid stream being measured comprise phases selected from the group consisting of at least one liquid phase; and a solid phase and at least one liquid phase. In contrast to the methods and systems recited in Applicant's claims, the Farchi reference discloses a device and method for use in measuring fluid streams that include gas phases. Accordingly, the fluid stream being measured in Applicant's methods and systems is not the same as that being measured in the device and methods disclosed in the Farchi reference. Such an argument is not persuasive. Farchi teaches measuring multi-phase liquids that include water, gas and liquid or oil. As to the argument that Farchi reference is much more complicated and uses more elements for such measurements is acknowledged, however, the applicant broadly claims the functional part of the device where simply the volumetric flow rate and the momentum rate of the fluid stream is being measured. Farchi also teaches the measurement of volumetric flow rate and the momentum rate. As to using a single or multiple sensors is not claimed as argued. Hence the argued limitation cannot be given any patentable weight.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5, 8, 9, 11, 12, 17, 19-23, 25-27, 34 and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Farchi et al. (5,461,930) (hereinafter Farchi).

Art Unit: 2855

Farchi teaches a device and method for determining mass flow rate of a fluid stream comprising a volumetric flow device (10), a momentum device (12, 14) and a processing device connected to the volumetric device and the momentum device to determine the flow rate. As to the determining the flow rate by multiplying the density with the volumetric flow rate is inherent using known formulas as it is known to that mass flow rate is nothing more than a product of the volume and the density of the flowing medium through the flow path.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6, 7, 10, 13, 14, 16, 18, 24, 28-31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farchi in view of acknowledged prior art information.

Farchi teaches all the features of the instant invention except for the various steps of determining the flow rate. It would have been obvious to a skilled artisan to manipulate any known relationship in a processing device to determine any needed parameter since such determinations are notoriously well known in the flow metering art. Furthermore, such determinations are made based on the need of an individual. As to the diameter of the pipe, the pipe size can be selected based on the type and environment the device would be used. As to the wedge meter having a wedge element comprising an abrasion resistant material would be inherent as admitted by the applicant that such requirements should be fulfilled based on the type the device is being used.

*Conclusion*

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harshad Patel whose telephone number is (571) 272-2187. The examiner can normally be reached on Monday-Thursday (7:00 AM-5:30 PM).

  
*Harshad Patel*  
*Primary Examiner*  
*Art Unit 2855*

hp  
January 10, 2005